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CAYUGA INDIAN RELICS.

BY W. M. BEAUCHAMP.¹

I HAVE been much indebted to Mr. W. W. Adams, of Mapleton, Cayuga County, for valuable information regarding New York Iroquois sites, and for the opportunity of examining and figuring many fine and remarkable relics. Like some other parts of the Iroquois territory, the occupation of the country about Cayuga Lake, by settled inhabitants, seems very recent. There are a few old sites, but by far the larger part are of historic times. There are half a dozen early earthworks in the county, but most of them are distant from the lake. As in the country of the early Senecas, there is little earthenware, and that of a coarse kind, contrasting strongly with the abundant supply of the territory of the Onondagas and Mohawks. From history, traditions and remains, as well as language, it seems probable that the Cayugas and Senecas branched off from the parent stock at Lake Erie, perhaps on both sides; while the three eastern nations led the van on the north of Lake Ontario to the St. Lawrence, and thence passed southward to their later homes. Archæologists certainly have good reasons for such a belief.

There were travelers and early hunters and fishermen along Cayuga Lake, some of whom had small villages there for a time. A few left mica in graves, and lost some fine articles in the camps or by the wayside. Long shell beads were used by some, and as these have been found in recent graves as well, they form a link with the past. The wearers were probably the first true Cayugas. These long beads were formed from the columellæ of sea shells, and one is six and three-quarter inches long, while a number are but little less. Out of one

¹ Rev. W. M. Beauchamp has long been noted for his investigation of Indian archæology in Western New York. He is an indefatigable laborer, and his investigations have been of great benefit to the science. He is more disposed to observe and record facts than to develop theories. His last remark in the above paper is worthy of consideration. It has come to be a maxim in some parts of the world that prehistoric objects are to be found, not in number as they exist, but according to the number and diligence of their seekers.—T. W.

PLATE XVIII.



Fig. 1. Shell Bead.

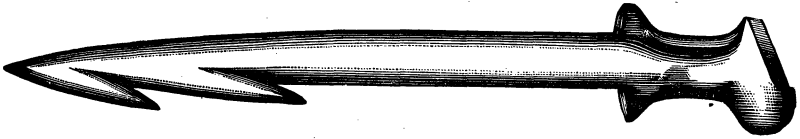


Fig. 2. Bone Harpoon.

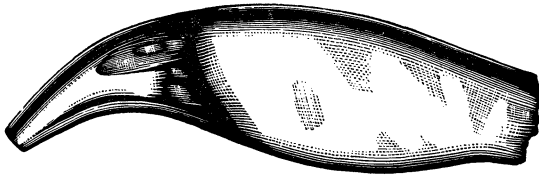


Fig. 3. Bear's Tooth.

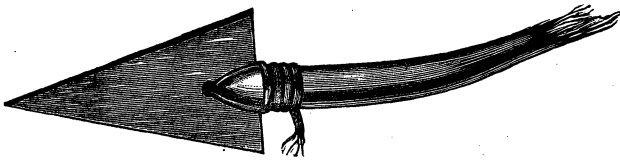


Fig. 4. Arrow-head.

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grave Mr. Adams took four which aggregated twenty-two inches, and six more formed a line of the same length. Fig. 1 is of the exact size of one of six taken from a grave last year. This grave contained a most curious assortment of articles, of which I will speak particularly before concluding. While smaller beads of this kind occur on historic sites, and very rarely on prehistoric villages, I know of none so large elsewhere in New York. The chiefs who wore them in their first splendor must have been proud of their ornaments.

While prehistoric shell beads of any kind are so rare through the old Iroquois territory of New York, the small council wampum, of course, is found only on later sites. The Five Nations had none of this before the coming of the Dutch. This is a fact now clearly established. There are other late beads of bone, stone, porcelain, glass, and discoid and oval shell beads. Sometimes mere shells of *Melampus* and *Marginella* have been strung, but never any fresh water univalves, as far as I know. The Venetian glass beads are often of many colors and intricate patterns, and sometimes of singular beauty. Some plainer glass beads are quite attractive also.

Ornaments of perforated red slate and pipestone belong also to the later sites, but most of those gathered by Mr. Adams now grace the cabinet of Mr. A. G. Richmond, of Canajoharie. A pretty little mask of Catlinite, smaller than a finger nail, came from a recent Cayuga grave. I have seen but one other as small, and that from an Onondaga site of A. D. 1700. Shell and bone ornaments include the familiar Iroquois forms of disks, crescents, fishes, and those to which we can hardly give a name. Combs came with the white man, but the Indian soon made for himself those of bone or horn, the top generally symmetrically arranged, as two men, two serpents, two birds. Fine examples of these have come from Cayuga sites—indeed, the best I have seen.

The bone harpoon, Fig. 2, is from a recent Cayuga grave, and most large harpoons that I have known are not old, say two hundred and fifty years or less. I have figured them from historic sites of the Onondagas and Mohawks besides.

This one is stained red, a rare feature, and it presents other peculiarities. A smaller slender and delicate harpoon was found near the lake shore, and I have seen none prettier. It has six barbs on either side, and seems much older than the one represented. The same form, but less delicate, occurs on the Seneca River.

Both copper and iron fish-hooks are met with, and sometimes the corroded metal has preserved the cord. None of bone or horn have appeared near Cayuga Lake, though several have been found in Onondaga and Jefferson Counties. Three or four prehistoric specimens, with barbs, have come to my notice. Among other Cayuga fishing implements are innumerable flat sinkers and perhaps the ovoid grooved stones. The former are of more general distribution than the latter.

Bears' teeth occur, as in other places. Fig. 3 is one of sixteen from the same grave. They were used much earlier, and often perforated for suspension. Human teeth I have found thus perforated. While examining an old Cayuga burial place, Mr. S. L. Frey, of Palatine Bridge, found an arrow made of a fossil shark's tooth, only altered by cutting slits to bind it to the shaft. A single glass bead, found at the same time, makes its age doubtful.

Stone arrow and spear-heads are in moderate numbers; scrapers and drills very rare, owing to the small number of early Cayuga sites, these being early implements. Some of the triangular arrows, made of sheet copper or brass, occur, generally with one or two perforations for binding the arrow, but sometimes with none. Fig. 4 shows one with part of the shaft remaining attached. They are of the same pattern as those found with the Fall River skeleton. Mr. Adams has also belts with copper tubes, suggesting those encircling the skeleton mentioned. Such arrows in Onondaga belong to the latter half of the seventeenth century. The copper age of the Five Nations lasted nearly a century, when they adopted silver for ornaments. During the earlier period of European contact they used copper wire bracelets, brooches and ear-rings, bronze rings, copper beads, and other articles. Of these Cayuga

affords good examples, as well as the other cantons. Iron is found on all recent sites.

Good clay pipes have proved abundant near Cayuga Lake, and the ridge along the sides of the stems of many is an unusual feature. They present the common variety in form and ornament. Fig. 5 is called a wolf-totem pipe by Mr. Adams, who took it from a grave last spring. It is of the type common two hundred years ago. A little later the Indians reversed the arrangement of the head or ornament. A curious detached terra cotta Cayuga ornament represents a man's head with a pointed helmet. These detached ornaments are found in other parts of the Iroquois territory. Slender pewter and iron pipes are rarer, but the former have quite a range. Stone pipes were little used by the Cayugas or their predecessors.

Figs. 6 and 7 Mr. Adams calls gambling flints. The larger one may be a frequent form of knife, or he may be correct in his name. The smaller one is quite likely to have had such a use. Had they shown signs of wear, I might have thought them Indian gun-flints; but there is no good reason for this, and their place in a chief's grave gives them some importance. They are not of the scraper form, and are too small for ordinary knives. Twenty-one occurred in one Cayuga grave, but I have found them singly in Onondaga County. They are neatly chipped, and suggest the bone, stone and clay counters once used, now represented by peach stones and deer buttons.

One curious article Mr. Adams has loaned me, which is probably old. The point of a flint arrow had been broken off, and below the fracture a deep indentation was neatly chipped, making the whole not unlike a rude fork. Like the concave or curved scrapers of Onondaga County, it may have been employed in forming arrow shafts, though not a true scraper like them.

Fig. 8 is of a horn implement, perhaps a punch for ornamenting pottery, though of rather a late date for that. This is a Cayuga form, but they are found on other sites of the

middle of the seventeenth century. In a very old grave Mr. Adams found a slender marrow-bone, the central part shaved down into a long elliptical opening. The cavity was filled with paint, and a slender pestle for mixing paint almost closed the orifice. In this grave was a large piece of mica.

Some old burial places present curious features. In one spot an upper stratum of bones had been disturbed, but on removing a layer of soil two inches thick another would be found, and thus until the fourth bottom course was reached. Sometimes a single skeleton occupied one course, and then there might be three or four side by side. Ten or twelve would be the average in the successive burials, but in one case there were over twenty. One or more skeletons would have accompanying articles, and these were early burials.

Here is a curious and suggestive list of articles found in a Cayuga chief's grave last year by Mr. Adams: "Seventeen flints, 2 gun-flints, 6 bullets, 6 baldric beads, 1 bone harpoon, 3 buckhorn handles, 1 knife with buckhorn handle, 21 gambling flints, 3 bars of lead, 5 rubbing stones, 16 bears' tusks, 2 axes, 1 brass kettle, 2 pair shears, 4 pair bullet moulds, 2 gun-locks with flints, 47 pieces gun-locks, 2 iron shears, 32 knives and cutting implements, 1 gun, 1 pipe, 1 piece death paint (plumbago), 1 piece mica, 2 trigger guards, 1 wormer, 1 gun-cleaner, steel and 2 flints, a quantity of powder in a cloth bag, 2 melting ladles, 2,500 wampum beads." Each bar of lead weighed three pounds. The mica shows a modern as well as ancient use, and some other articles would elsewhere be thought old.

Of recent articles Mr. Adams has obtained a large number, and some of those of the Jesuit period are of much interest. Copper kettles prove much more frequent than vessels of clay, and many articles still used by the New York Indians occur. The valley of the Salmon Creek was once rich in remains, and accounts were published long ago of the large quantities of iron and brass taken thence to Auburn for sale. They were plowed up for a space of several miles in length along the bottom lands.

As in other cases, the Cayuga relics cannot all be classified, and some are found which are sufficiently puzzling. Among these are some of the ruder implements. These may be passed over now, but the foregoing account will show what may sometimes be done in a short time in a field supposed to have been exhausted.

DAYS AND NIGHTS BY THE SEA.¹

BY FRANCIS H. HERRICK.

FOR one who has spent his life inland, a visit to the sea and especially to the tropical sea is an event to date from. The revelation of a new world awaits him. Strange forms innumerable meet him at every turn, and he soon comes to realize that the sea is the great home of life.

The simple outfit of thirty years ago is utterly inadequate for the student of nature of to-day who hopes to add anything of importance to our knowledge of the organic world. He needs not only good microscopes, drawing materials, ample aquaria and dredging apparatus, but a large assortment of chemical reagents, the uses of which in the preservation and study of living matter has almost revolutionized the science of biology.

Nearly all marine animals discharge their eggs into the water in vast numbers, and the young which are hatched from them, in most cases, lead an independent swimming life at the surface of the ocean. This locomotor larval period as it is called, may extend over weeks or months, and is shared by animals which in the adult state have the most diverse habits, such as the coral, the barnacle, and the mussel, which are firmly anchored to some solid support, the starfish and sea-urchin, the jellyfish and annelid, the crabs and prawns, the salpas and amphioxus; and also the fishes, the highest type of marine life which pass their early stages at the surface of the

¹ Part of a lecture delivered in the "University Lecture Concert Course," Jan. 31, 1889. Western Reserve University, Cleveland, Ohio.